

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/666,348	09/18/2003	Kiruba Sivasubramaniam	124711	124711 8185	
7590 04/22/2005			EXAM	EXAMINER	
General Electric Company			VAN, QUANG T		
GRC Patent Doc	ket Rm 4A59				
Bldg. K-1		ART UNIT	PAPER NUMBER		
P.O. Box 8			3742		
Schenectady, NY 12301			DATE MAILED: 04/22/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

•	Application No.	Applicant(s)				
	10/666,348	SIVASUBRAMANIAM ET AL.				
Office Action Summary	Examiner	Art Unit				
	Quang T Van	3742				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 24 March 2005.						
, _	·					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-37 is/are pending in the application.						
4a) Of the above claim(s) <u>9-19 and 26-37</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-8 and 20-25</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>18 September 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date	6)					

Application/Control Number: 10/666,348 Page 2

Art Unit: 3742

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6, 8, 20-23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Dunne (US 5,512,083). Dunne discloses a process and apparatus for the dehumidification comprising a plurality of heat transfer plates (120), each of said heat transfer plates (120) being disposed radially with respect to a magnetic core axis (figure 1A) and a plurality of magnetic core sections (col. 8, lines 66-67 and col. 15, lines 9-12) disposed between respective pairs of said heat transfer plates (120) and shaped to form a cylindrical core assembly (figure 1A).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 5, 7 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunne (US 5,512,083) in view of Hattori et al (US 5,941,302). Dunne discloses substantially all features of the claimed invention except heat transfer plates comprising

Application/Control Number: 10/666,348 Page 3

Art Unit: 3742

material or combination of materials selected from the group consisting of aluminum nitride and boron nitride. Hattori discloses heat transfer plates comprising material or combination of materials selected from the group consisting of aluminum nitride and boron nitride (col. 5, lines 35-37). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize in Dunne heat transfer plates comprising material or combination of materials selected from the group consisting of aluminum nitride and boron nitride as taught by Hattori in order to provide better heat transfer plates. With regard to claim 5, Hattori only discloses heat transfer plates comprising material or combination of materials selected from the group consisting of aluminum nitride and boron nitride (col. 5, lines 35-37), but does not disclose said outer shell comprising a material or combination of materials selected from the group consisting of aluminum nitride and boron nitride. It would have been obvious to one having ordinary skill in the art to make outer shell comprising a material or combination of materials selected from the group consisting of aluminum nitride and boron nitride. Doing so would provide an outer shell being made of material be able to transfer heat as same as heat transfer plates.

Response to Amendment

- 5. Applicant's arguments with respect to claims 1-8, and 20-25 have been considered but are moot in view of the new ground(s) of rejection.
- 6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 3742

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang T Van whose telephone number is 571-272-4789. The examiner can normally be reached on 8:00Am 7:00Pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/666,348

Art Unit: 3742

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Q۷

April 19, 2005

Quang T_Van

Primary Examiner Art Unit 3742